

Borough of Chorley.

**Medical Officer of Health's
Annual Report,
1919.**



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CHORLEY,

MARCH, 1920.

TO THE CHORLEY TOWN COUNCIL.

GENTLEMEN,

In view of my resignation as Medical Officer of Health to the Borough of Chorley, to which position I was appointed in 1879 by your predecessors, the Chorley Commissioners, I intended to review the progress made in the general, and especially sanitary condition of the Borough during the last forty years. However, by the instructions of the Ministry of Health, I am directed to make a more elaborate report than usual, and one following certain lines ; so I have decided to omit this review, which perhaps would have been of less general interest to others than to myself.

The subjects which the Ministry of Health require to be commented upon in my Report, are as follows :—

- A.** Natural and Social Conditions of the Borough.
- B.** Sanitary Circumstances of the Borough.
- C.** Food.
- D.** Prevalence of and Control over Infectious Diseases.
- E.** Maternity and Child Welfare.
- F.** Sanitary Administration.
- G.** Housing.

A NATURAL AND SOCIAL CONDITIONS.

1.—The population of Chorley at the Census (1911) was 30,317.

The population of Chorley estimated by Registrar General for 1919—Total, 32,912. Civil, 31,594.

2.—Chorley is situated on a gentle elevation, sloping from North to South, about 100 feet . and from East to West, more than 200 feet. The main portion of the town is between 280 and 350 feet above sea level.

The subsoil is mainly clay, but in several parts of the town gravel and sand come very near the surface.

The climate is temperate. Average rainfall for ten years, 1910–1919=38.78-in. Prevailing winds, West. The West end of the town is about twenty miles distant from the sea.

3.—The chief occupations of the people are cotton spinning, weaving and bleaching, coal mining, motor works, waggon building, floor cloth works, etc.

The very great majority of the inhabitants belong to the working classes. A very large proportion of female labour is employed in the cotton mills in weaving, winding, etc.

4.—**Vital Statistics.**—**BIRTH-RATE.**—Five hundred and thirty-one (531) births were registered in the Borough in 1919. A few of these were not born to residents, and had to be transferred by the Registrar General to other Local Authorities, whilst a few other births occurring outside the Borough were born to residents of Chorley.

The nett number of children born to residents of the town was five hundred and thirty-two (532), viz. two hundred and sixty-eight (268) males, and two hundred and sixty-four (264) females.

Twenty-one (21) of the births were Illegitimate, that is to say, slightly below 4 per cent of the total number—a percentage lower than has obtained in the last few years.

The **Total** population of the Borough for 1919 has been estimated by the Registrar General at 32,912, and from this estimate, I calculate the birth-rate at 16.1 per thousand per annum.

This rate is 3.0 per thousand higher than that of 1918, but is 5.4 per thousand lower than the average of the preceding ten years (1909–1918), 11.7 per thousand lower than the average of the previous decade (1899–1908), and is hardly half the average rate that used to be noted in the early years (1879–1889) of the period I have been Medical Officer of Health.

Compared with the birth-rate of England and Wales for 1919, viz. 18.5, the rate for Chorley is 2.4 lower than that of the country at large, and 2.2 lower than the average of the smaller towns in England and Wales (20,000 to 50,000).

DEATH-RATE.—The number of deaths registered in the Borough in 1919 was four hundred and four (404). Sixteen (16) of these occurred in persons not resident in the town, whilst the deaths of twenty-one (21) residents occurred, and were registered elsewhere.

The total number of deaths of residents was, therefore, four hundred and nine (409), of which one hundred and ninety-seven (197) were males, and two hundred and twelve (212) females.

The Registrar General's estimate of the **Civil** population of the Borough for 1919 is 31,594, from which I calculate the death-rate for the year at 12.9 per thousand. This rate is 5.7 per thousand below that recorded in 1918, 2.5 per thousand below the average rate of the preceding ten years (1909–1918), and 4.6 per thousand below the average of the previous decade (1899–1908). The death-rate is also 0.9 per thousand below the average death-rate for 1919 throughout England and Wales.

The death-rate would have been much lower, had Chorley escaped the epidemic of Influenza in the first quarter of the year, as you will see from the following statement of the death-rates for each quarter of 1919

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Totals.
Number of deaths ...	174	96	65	74	409
Death-rate ...	22.0	12.1	8.2	9.7	12.9

In Table I the deaths of residents are arranged under Causes, Groups of Ages, Wards or Workhouse, and the total number of deaths due to each cause in Public Institutions in the Borough.

This Table somewhat differs in arrangement from the Registrar General's Annual Return.

Infantile Mortality.—I am glad to report to you that the infantile mortality recorded in 1919 was much below that of any year in my experience.

The number of deaths under one year of age in the Borough was only forty-nine (49), and the proportion of infantile deaths to births was ninety-two (92) to one thousand.

The infantile mortality in 1918 was one hundred and eight (108) per thousand—then the lowest on record.

During the last twenty-five years, there has been a marked reduction in the infantile mortality, not only throughout the country, but also in your Borough.

The subjoined Table, giving the average infantile mortality for each succeeding quinquennium, shows the great and progressive improvement.

Average Infantile Mortality, 1894–1898 ...			188 per thousand.
„	„	„	1899–1903 ... 188 „
„	„	„	1904–1908 ... 152 „
„	„	„	1909–1913 ... 139 „
„	„	„	1914–1918 ... 123 „

During the last five years there has been a steady decrease in the infantile mortality, as detailed below.

1914	...	...	149	per thousand.
1915	...	...	132	„
1916	...	...	113	„
1917	...	...	112	„
1918	...	...	108	„
whilst in 1919 it was only	...		92	„

This progressive decrease in infantile mortality may be assigned to a combination of causes such as improved sanitation throughout the town, less poverty, more adequate supply of professional mid-wives, less ignorance of the mothers as regards proper methods of rearing their children, the work of instruction carried out by the Health Visitors, etc.

After a careful review of my Reports for the last thirty years, I find that there has been a decided decrease also in the mortality of children under five years of age, as well as that of infants under one year.

Taking the eight years preceding 1919, I find that 30 per cent of the whole number of deaths occurred in children under five years of age, whereas in 1919, only 21 per cent of the deaths were in children under that age. In some years in the last decade of the previous century, I find that 44, 46 and 47 per cent of the whole number of deaths in the respective years were noted as having occurred under five years of age.

Though the decrease of child mortality is certainly gratifying, it has not by any means reached such a point that the Local Authorities can safely relax their efforts, and I have great hope that the work of Maternity and Child Welfare will be gradually expanded so that no means to conserve young life may be omitted.

The respective causes of death and the ages (in weeks and months), at which death occurred are given in Table II, annexed to this Report.

Poor Law Relief.—During the year there has been an average of sixty (60) patients in the Poor Law Hospital ; of fifty (50) ordinary inmates, and nine (9) children in the Children's Home. An average of seven (7) patients per week are attended by the Poor Law Medical Officers. These numbers include inmates from the whole of the Chorley Board of Guardians' District, but rather more than half of total number are Chorley residents.

In Out-door Relief, the amount spent in one year, Sept., 1918 to Sept. 1919, was £1,918, upon twenty-nine (29) men, eighty-three (83) women, and ninety-nine (99) children ; all belonging to and resident in Chorley.

B SANITARY CIRCUMSTANCES OF CHORLEY.

1.—**Water.**—The water supply of Chorley is obtained from the Liverpool Corporation Waterworks, situated in the immediate neighbourhood of the Borough.

The supply is constant, and for some years has been ample—the shortage of water formerly present in the higher portions of the town having been remedied by the Liverpool Corporation.

The water shed is on upland and partially moorland country, and the water is filtered before it comes into the town. It is very agreeable to taste, and is not hard.

Several years ago, one or two cases of Lead Poisoning occurred, and the water was analysed, with the result that a very small proportion of lead was discovered. Lately, I have had no reason to think that there is any plumbo-solvent action in the supply. A few farmhouses in the outskirts, and situated too high for the Liverpool Water supply, obtain water from wells

2.—**Rivers and Streams.**—These are under the charge of the Ribbleshead Water Committee, and their Inspectors regularly examine into their condition.

Chorley being a manufacturing town, does not have the

advantage of clear, unpolluted streams, but the Corporation have adopted every means at their Sewage Works to purify the effluent so as not to add to the pollutions that come through the outskirts of the town from higher up the rivers.

3.—Drainage and Sewerage.—The drainage and sewerage of the town are good. There are four Sewage Disposal Works, one of which, at Common Bank, treats the sewage from more than three-quarters of the town. The other works are at Cowling, Heapey Road, and Botany. At the Common Bank Sewage Disposal Works, there is an elaborate system of precipitating tanks with automatic discharge on to filter beds, and the effluent from these is conveyed by a channel to the river. The sewage on entering the works, passes through a detritus chamber, and along a series of channels where it is treated with precipitant made of bauxite and vitriol, and the filters are carefully graded. (Gravel, sand, and in some of the older filters, polarite).

There is also a sludge pressing machine in use, and the solid matter is sold to the farmers.

At Cowling works, the same process of precipitation and filtration is followed before discharging the effluent into the stream.

The Sewage Works at Heapey Road and Botany have no filters. The sewage, after being treated, before passing into the precipitating tanks, is subjected to land irrigation.

The sewers throughout the town were flushed during the Summer.

4.—Closet Accommodation.—There remain only a few houses for which water closet accommodation is not provided. In the outskirts (farm-houses, etc.), at my last return early in 1919, there were entered fifty-nine (59) privy middens and twenty-two (22) pail closets, the latter being regularly emptied by the Corporation Scavengers.

The number of fresh water closets was given at seven thousand and ninety (7,090), and of waste water closets at nine hundred and eighty nine (989). Owing to the much greater liability to be blocked, etc., of these latter closets, the Corporation are no longer allowing builders, etc., to provide this form of water closet.

Eight (8) conversions from pails to fresh water closets have been made in 1919.

Each house has a separate closet with the exception of about two hundred houses, where the number of houses to closets is either three to two, or two to one.

5.—**Scavenging.**—This is undertaken by the Sanitary Authority. Dust bins are used throughout the towns and their contents are removed weekly, and consumed in the destructor—except in the case of one district, where a tip is used. This tip is on the extreme outskirts of the town.

In the case of a few farm-houses on the outside of the town, the farmers attend to their own refuse.

The scavenging of the town is, in my opinion, efficiently carried out.

The following figures give some idea of the work done in scavenging during 1919.

				Number Examined.	Stoppages Removed.
Fresh Water Closets	...	...	...	10922	446
Waste Water Closets	...	...	...	1717	380
Yard Drains	...	...	...	25135	773
				-----	-----
Total	...	...	...	37774	1599
				-----	-----

The amount of refuse consumed at the Destructor in 1919, was

					tons.	cwts.	qrs.
House Refuse	...	...	...	...	...7217	15	1
Trade Refuse	...	...	...	...	... 125	8	1
Fish Refuse	...	...	...	...	... 125	13	0
Condemned Meat and Offal	...	...	...	...	... 23	13	0
Slaughter House Manure	...	...	...	...	... 24	15	1
Total	...	...	...	...	...7517	4	3

The fish refuse and slaughter house manure is made into a concentrated manure at the Destructor. This manure has a ready sale.

The streets are regularly watered, except in rainy weather, and a staff of men, etc., is engaged in brushing, etc.

6.—**Offensive Trades.**—The following is a list of the offensive trades carried on in the Borough.

Tripe Dressers	...	...	8
Tallow Melters	...	...	2
Gut Dressers	...	...	2
Tanners	...	...	2

Generally, these occupations are carried on without any nuisance being inflicted upon the neighbouring premises.

Several complaints have been made against one of the tallow works, and extensive alterations have been made by the proprietors within the last two or three years.

7.—**Lodging Houses.**—There are only two common lodging houses on the register. These are owned by a company, and are well kept. At present they meet all the necessities of the town.

8.—**Bakehouses.**—There are eighty-six (86) bakehouses in the Borough on the register. Three (3) are underground, and are certified as such. The general condition of the bakehouses is good.

9.—**Factories and Workshops.**—These have been in many cases visited during the year. The following defects were found, and in all cases have been remedied.

Want of Cleanliness	...	...	...	3
Defective Sanitary Accommodation	...			15
Insufficient Sanitary Accommodation	...			1
Insufficient Exits	...	...	...	1

10.—**Baths.**—Before the war the question of establishing Public Baths occupied much attention by the Baths Committee. A site had been fixed, an architect engaged, and plans and estimates submitted and approved. Unfortunately, this matter had to be set aside, but recently, the subject has been again raised, and the Baths Committee re-instituted.

I hope that this very necessary improvement will be soon carried out by the Town Council.

Schools.—In the Borough there are twelve Elementary Schools, one Secondary School, and three small Private Schools. At my request, the Assistant School Medical Officer, now my successor, recently inspected all the Elementary Schools, and is preparing a full report of their general and particularly sanitary condition. This report will be presented to you by him.

Generally speaking, the schools are in a good condition, but some of the older schools are not up to the standard required in new schools.

The chief defects found were insufficient cleaning of the floors, etc., the sanitary arrangements not kept in a satisfactory state, deficiency in size of cloakrooms, and lighting of the schools not from the right direction. The water supply for the schools is from public mains.

As regards the prevention of spread of Infection, the action taken by me, recommended in the Memorandum on Closure, etc.. (1909), has been followed by me.

During the year, three schools have been closed on account of Infectious Diseases.

C

FOOD.

(a)—**Milk Supply.**—The inhabitants of Chorley are supplied with milk distributed by the farmers, and cow-keepers residing in the Borough, or in the neighbouring rural townships. During the war, and also subsequently, there has not been an adequate supply from time to time, and, in common with the rest of the country, restrictions upon the quantity of milk supplied to the families have been imposed. By the Local Food Controller, preference has been given to infants, young children, invalids and old people, and he has been ready to give priority certificates in such cases.

A Municipal Milk Supply from the Corporation Farm has been in operation throughout the year, and has been of very great service in providing a more or less adequate supply of milk to children under two years of age. In most cases, this milk has been paid for by the parents of the children at the current price—but, in certain instances of inability to pay the full price, either half or the whole of the payment has been remitted, according to a scale of average income of the family, less house rent, instituted by the Council.

The milk supply throughout the town is distributed by milk carts every morning, and in not a few instances in the evening. A great waste of energy and time is incurred owing to the several farmers distributing more or less, all over the town, and, if some arrangement could be made so that different localities should be served by different farmers, the milk would be distributed earlier, and less time would be lost by the farmers themselves.

The number of cowkeepers on the register at the end of 1919 was thirty-four (34). Dairies and Cowsheds Regulations are in force in the Borough.

There are only two dairies in the town, but at several small shops milk is sold in small quantities.

The quality of the milk is, as far as I can ascertain, generally good, and no prosecution has been undertaken as the result of the examination of samples of milk from the various purveyors. No action as to tuberculous milk has been taken during 1919.

Action taken under Milk (Mothers and Children) Order, 1918, is detailed under Maternity and Child Welfare Section.

It is to be hoped that the Tuberculosis (Animals) Regulations which were intermitted during the war will soon be revived so that the farmers will be more easily induced to concur in the slaughter of animals seriously affected with Tuberculosis. The Regulations were very useful until they were temporarily revoked.

(b).—**Other Foods.**—The Sanitary Inspectors regularly visit the Market, and inspect the food there exposed for sale; and from time to time inspect the premises where such food as tripe, sausages, etc., are prepared for sale. Any article found to be unfit for food has been seized by the Inspector and subsequently destroyed. During 1919, three thousand seven hundred and fifty-five (3,755) pounds of food, apart from meat, unfit for human consumption have been sent to the Destructor.

There is no private slaughter house in the Borough. A Public Abattoir was erected more than forty years ago, and within the last few years has been altered and remodelled, and is now in a very satisfactory condition, and sufficient for the needs of the town.

Until the withdrawal of the restrictions, the whole of the meat consumed in Chorley, except that of pigs, passed through the

Abattoir, but within the last two or three months, the frozen meat is now consigned directly to the butchers, and can only be inspected at the shops.

The following list gives the number of animals dealt with at the Abattoir in 1919.

		Killed at Abattoir.	Killed at Birkenhead.	Frozen Meat.	Total.
Cattle ...	...	1163	1495	211	2869
Calves ...	...	533	...	...	533
Sheep	...	3310	3250	1338	7898
Pigs ...	...	1245	...	...	1245
		<hr/>	<hr/>	<hr/>	<hr/>
Total	...	6251	4745	1549	12545
		<hr/>	<hr/>	<hr/>	<hr/>

There have been condemned and destroyed the following animals, and the offal of such other animals, the meat of which was passed as fit for food.

		Tuberculous	Other Diseases.	Tuberculous Offal.	Other Offal.
Cattle ...	...	4490 <i>lbs</i>	2815 <i>lbs</i>	...	...
Calves	...	...	158 <i>lbs</i>	...	...
Sheep ...	...	...	372 <i>lbs</i>	...	...
Pigs ...	...	...	263 <i>lbs</i>	...	...
		<hr/>	<hr/>	<hr/>	<hr/>
Total	...	4490 <i>lbs</i>	3608 <i>lbs</i>	14488 <i>lbs</i>	7104 <i>lbs</i>
		<hr/>	<hr/>	<hr/>	<hr/>

The Sanitary Inspector has called me in where there has been any doubt as to the fitness of the meat for human consumption, or when there has been any dispute.

No prosecution under Section 117, Public Health Act, 1875, has been instituted in 1917

Adulteration of Food.—I am glad to say that there has been no prosecution instituted by the County Authorities of any tradesman for selling adulterated food, etc., in contravention of the Food and Drugs Act. The County Police have taken sixty-eight (68) samples during the year, and submitted them to the Analyst, but have not found it necessary to prosecute any person for selling goods which were adulterated.

The articles purchased by the Police comprised the following.

Milk	...	...	...	25	samples
Margarine	...	...	...	7	„
Pepper	...	...	...	6	„
Lard	...	...	...	5	„
Cocoa	...	...	...	5	„
Coffee	...	...	...	3	„
Butter	...	...	...	2	„
Other articles of Food or Drugs	...	...	...	15	„
One sample each				—	
Total	.....	...	...	68	samples.

D

INFECTIOUS DISEASES.

Including Notifications under the Tuberculosis Regulations, two hundred and seventy-five (275) cases of Infectious Disease were notified to me during 1919.

Influenza has not been made a compulsorily notifiable disease, or I would have had to report to you a very much higher number of cases. However, early in the year, Influenzal Pneumonia and Acute Primary Pneumonia were inserted on the list of notifiable diseases, and thirty six (36) cases were reported.

No case of Smallpox has occurred in the town since 1903, and no primary vaccinations or re-vaccinations under the Public Health (Smallpox Prevention) Regulations, have been performed by me during the year.

Diphtheria has been more prevalent in Chorley than I have known previously. Fifty-three (53) cases were notified, of which twenty-one (21) were removed to the Isolation Hospital. Twelve (12) deaths resulted from Diphtheria, or a case mortality of 23 per cent. Unfortunately, medical aid is not unfrequently postponed by the parents until it is too late for the beneficial use of Diphtheritic Antitoxin, which is of so great service in the cure of Diphtheria. Your supply of this Antitoxin has been gratuitously obtained by the Medical Practitioners much more frequently than it used to be, and is always in stock at the Sanitary Inspector's Office.

ScarletFever has been notified in twenty-nine (29) instances. This number though higher than that recorded in 1918, was very much lower than the average of the previous decade (1909–1918), viz.: one hundred and eight (108), and during several months of the year no cases were reported.

Twenty-six (26) cases were removed to the Isolation Hospital, and no death resulted from this disease.

Enteric Fever.—Five (5) cases of Enteric Fever were notified in 1919, but only three (3) houses wereinvolved, as three (3) cases occurred in one family. These three cases were taken to the Isolation Hospital, and all recovered.

Of the two other cases—one ended fatally.

The average number of cases per annum for the five preceding years (1914–1918) was 5.2 ; for the previous ten years, (1904–1913), was 11 ; and for the decade (1894–1903), was 40.4.

The establishment of the water carriage system has been a very great factor in the progressive diminution in the number of cases of Enteric Fever occurring in your Borough.

Measles has not been very prevalent during 1919. Only sixty-one (61) cases were notified to me, and only one death resulted.

This Disease has now been removed from the list of Compulsorily Notifiable Diseases, and the only means of your Medical Officer of Health obtaining any opinion as to the prevalence or otherwise of Measles will be by the Teachers reports from the Elementary Schools, and from information acquired by the Health Visitors and School Nurses in their daily routine of visits.

The remaining cases of Notifications of Infectious Diseases occurring in 1919 were Erysipelas, eleven (11); Puerperal Fever, Poliomyelitis, Ophthalmia Neonatorum, and Encephalitis Lethargica, one (1) each; Malaria, twenty-eight (28); and Dysentery, two (2), (notified by the Soldiers' Pensions Board); and Tuberculosis, forty-six (46).

Encephalitis Lethargica.—One case of this disease was notified to me in March. The person died, and a report was sent to the Local Government Board shortly after the death of the person attacked. No further cases occurred.

Malaria.—Twenty-eight (28) cases of Malaria were notified to me during the last six months of 1919. All of these were in soldiers, and the reports were issued from the Pensions Board, Preston. I have no reason to believe that any of these cases originated in the Borough.

Dysentery.—The two cases of Dysentery also occurred in discharged soldiers.

Of the Non-Notifiable Infectious Diseases, there has not been any great prevalence during the year. The information of these diseases is chiefly obtained by the reports sent to me by the Head Teachers of the Elementary School, and the full statistics have been given in my School Report. Shortly, one hundred and seventy-six (176) cases of Mumps, one hundred and twenty-seven (127) of Chicken Pox, and thirty-seven (37) of Whooping Cough were reported to me.

Diarrhœa and Enteritis.—Only three (3) deaths were registered from Infantile Diarrhœa. The deaths from this cause in 1919 and 1918 show a very remarkable improvement upon the rate that was common even in recent years, and still more so when the rate is compared with those contained in former Reports. During the last two years, there have not been as many House Flies as in some years, the public have been instructed by the distribution of leaflets on the danger of the “Fly” nuisance, and by the visits of your Health Visitors—and according to the new bye-laws, the treatment of the manure heaps in the town has been improved. To these causes, I attribute the marked diminution in the death-rate from Infantile Diarrhœa.

Tuberculosis.—Forty-six (46) cases of Tuberculous diseases were notified to me in 1919—of which thirty-three (33) were cases of Phthisis Pulmonalis, and thirteen (13) of Non-Pulmonary Tuberculosis. This is a smaller number of new cases than usual, but several persons have been in attendance upon the Tuberculosis Dispensary, prior to notification to me by the Medical Practitioners.

I think that it would be a better plan if all notifications of Tuberculosis were made directly to the Chief Tuberculosis Officer of the County, instead of being sent to the Local Medical Officer of Health, transmitted once a week to the County Tuberculosis Officer, and subsequently, by the latter to the Tuberculosis Officer of the Area. As the latter Officer is taking charge of all the work in supervision, etc., of tuberculous persons, and sends periodically to the local Medical Officer of Health, a report of the sanitary condition of the houses in which the patients reside—all necessary information can be obtained and acted upon by him.

Prior to the installation of the Tuberculosis Officer, I used to visit every case reported to me, but, in order to prevent duplication of Official visits, etc., I have ceased to do so, except in cases requiring a visit on account of sanitary defects in the house.

The cases of Non-Pulmonary Tuberculosis had the disease in the following organs :—

Glands	...	...	...	9
Spine	...	...	...	2
Hip	...	...	...	1
Cheek	...	...	...	1

The occupations of the persons suffering from Tuberculosis were as follows :—

				Pulmonary.	Non-Pulmonary.
Weaver	...	...	...	1	1
Miner	...	...	...	2	...
Clerk	...	...	...	1	...
Soldier	...	...	...	2	...
Labourer	...	...	...	1	...
Cloth-looker	...	...	...	1	...
Boot-maker	...	...	...	1	..
Domestic	...	...	...	1	...
Publican	...	...	...	1	...
Ragsorter	...	...	...	1	...
Dressmaker	...	...	...	1	...
Woodworker	...	...	...	1	...
Mill hand	...	...	...	2	...
Housewife	...	...	...	1	...
Shoe-maker	...	...	...	1	...
Children	...	...	...	...	12
Not known	...	...	...	15	...
Total				33	13

Thirteen of these persons have been received into a Sanatorium during the year, and also a few others who had not been notified to me in 1918 or 1917.

The deaths from Tuberculosis are given in Table I.

Disinfection.—Clothes, bedding, etc., from houses infected with Scarlet Fever, Enteric Fever, Pulmonary Tuberculosis, etc., are conveyed by the Disinfecting Van to the Town's Yard and there subjected to Steam Disinfection—(Goddard, Massey & Warner Apparatus). They are returned by another Van to the owners. This disinfection is undertaken immediately after the removal of the infected person to Hospital, or at the termination of the illness or death of anyone isolated at his own home.

The premises inhabited by the infected person, are also fumigated and sprayed at the same time as the Clothing, etc., are removed.

During the year the following work has been done in this direction :—

Houses Fumigated and Sprayed	...	87
Articles of Clothing, etc., disinfected	...	1226
Soldiers' Uniforms, etc., disinfected		
before rejoining their regiment	...	4
Schools and Hospital disinfected	...	16

Venereal Diseases.—The work of combatting the prevalence of, and of treating these diseases is undertaken by the Lancashire County Council. The scheme formed by this Council has been transmitted to every Medical Practitioner in the town, and all information has been given by me on the request of any person suffering from these diseases.

A Committee was formed to assist the Lancashire County Council in their Educational Campaign, and a Public Meeting was held in the Town Hall in July, which was well attended. Dr. MacAllister, of Liverpool, and Miss Tipper, the County Organizer, addressed the meeting. Other meetings of Mothers, School Teachers, etc., have also been held in the town under the direction of, and addressed by Miss Tipper.

Influenza.—This disease was very prevalent during the first quarter of the year. Two (2) deaths were registered in January, but there were comparatively few cases of Influenza till the end of the second week in February, when a great number of people were attacked. During the next five or six weeks, the epidemic continued, but began to subside in the last week of March, and since the end of April no death has been recorded from this disease.

Judging from the number of deaths and other information, I am of opinion that a very large number of people were attacked. Not only were there forty-three (43) deaths attributed directly to Influenza, but there was unusually high mortality from Bronchitis and Pneumonia—very commonly concomitant with or consequent on Influenza.

As in the previous epidemic of November, 1918, the disease proved most fatal to persons in the prime of life, between 25 and 45 years of age. I have not been able to trace any connection with the mortality from Influenza in regard to the sanitary condition of the houses and surroundings, and similarly in the Elementary Schools, some of the most modern and best constructed schools had more children reported to be suffering from Influenza than was the rule in the older schools.

This epidemic of Influenza was the third in nine months ; the first beginning in July, 1918, and lasting till the end of August, and the second occurred in October and November, 1918—this second epidemic being more fatal in its consequences than either of the other two.

It was predicted that in the early months of 1920, there might be a recurrence of Influenza, but, up to the writing of this report, I am glad to say that prediction has been falsified. It is very necessary, however, that the people should be educated in the best methods of avoiding and treating Influenza, and for this purpose, handbills are being printed for distribution in the Borough.

Bacteriological Examinations.—I am glad to say that very considerable use has been made by the Medical Practitioners of the opportunity to secure skilled Bacteriological examinations in suspected cases of Diphtheria, Enteric Fever, Tuberculosis, etc.

You have arranged that specimens obtained from persons suspected to be suffering from these diseases may be sent to the Clinical Research Association by the Medical Practitioners, and that a telegram should be sent within twenty-four hours, giving the result of the Bacteriological examination. Though more specimens have been sent during 1919 than in any preceding year, it would be more satisfactory if, in every instance where Diphtheria, Enteric Fever or Tuberculosis of the Lungs was suspected, confirmation of the diagnosis were secured by Bacteriological examination—and, if a school child has suffered from Diphtheria or Tuberculosis of the Lungs, and is convalescent, that a specimen should be examined before such child is allowed to return to school.

The examinations have given in the majority of instances, negative results, and the parents have been relieved from anxiety and unnecessary isolation, and other inconveniences obviated.

Sixty-five (65) specimens were sent in 1919, with the results as given below :—

			Positive.	Negative.	Totals.
Diphtheria	...	...	16	36	52
Enteric Fever	...	...	4	4	8
Tuberculosis of Lungs			2	3	5
			<hr/>	<hr/>	<hr/>
Totals	...	...	22	43	65
			<hr/>	<hr/>	<hr/>

The Tuberculosis Officer has also made many Bacteriological examinations of Sputum in cases reported to him, but I have not received any statistics from him.

E**MATERNITY AND CHILD WELFARE.**

1.—The inspection of Midwives acting in your Borough under the Midwives' Acts (1902 and 1918) is in the hands of the Lancashire County Council.

I have reported from time to time any dereliction of duty, etc., which have come to my knowledge, to the County Medical Officer of Health.

There are at present eight (8) registered Midwives residing in the Borough, of whom three (3) are in possession of the legal diploma, and five (5) registered as having been practising before the passing of the Midwives' Act.

2.—The arrangements already undertaken by the Chorley Town Council in reference to Maternity and Child Welfare are given in the following three sections of this Report. Special work in relation to the health of expectant mothers beyond instructions given to the Health Visitors in their daily routine, supply of milk to those who are necessitous, and occasional advice to the mothers visiting the Welfare Centres, has not been undertaken.

There is no maternity home or other institution in the town available for the reception of nursing mothers or children as in-patients, and there is also no maternity hospital. Children requiring surgical treatment are admitted into the Chorley Hospital.

Reports are regularly given to me by the Health Visitors as to the probable cause of all still-births notified to me, and the causes of death in infants and young children are also notified to me by the Health Visitors.

There are no Voluntary Societies in the Borough, except the Ladies' Committee, who are carrying out the work of the Child Welfare Centres, and some members of which are also members of the Maternity and Child Welfare Committee of the Town Council.

3.—Two cases of Ophthalmia Neonatorum were notified to me during the year. In both cases the Health Visitors paid almost daily visits until the eyes of the children were cured completely.

One case of Puerperal Fever was notified, but the woman recovered. A notified case of Acute Poliomyelitis also recovered. No action in relation to the treatment of Measles, Whooping Cough, Epidemic Diarrhœa, etc., has been instituted by the Chorley Town Council. As regards school children, the School Nurses visit the cases of Measles and Whooping Cough, Mumps, etc., but in the younger children this action is very rarely carried out.

There is no means of ascertaining the occurrence of Epidemic Diarrhœa, except from the visits of the Health Visitors in their daily routine. When such cases are met with, the Visitors give simple advice to the mothers.

Infantile Diarrhœa has been much less prevalent in Chorley during the last few years.

Child Welfare Centres.—The two Centres at Eaves Lane and St. George's Street Schools respectively, have been open regularly during the year one afternoon each week, except during the holidays, when it has been found impossible to secure the attendance of the parents and infants.

As I have previously remarked, the presence of the parents and infants, who are most in need of the supervision and advice furnished at these Centres, has not been secured to my satisfaction, and though good work is carried on at them, it is much to be desired that the attendance of the more necessitous cases should be obtained. The Health Visitors are constantly urging the advantages of the Centres upon such parents, but with very little success. At each Centre there is a lady who presides over the sale of clothing materials, gives advice, and furnishes patterns to the mothers. This Section has been very much appreciated by the persons attending the Centres.

Virol and, recently, Glaxo have been on sale there.

A Baby Competition under the "Daily Sketch" Scheme was held at each Centre in March, and Dr. Haworth, the Medical Officer of Health of Darwen, very kindly gave his services as judge on the two days of the Competition. Forty babies at Eaves Lane, and thirty-seven at St. George's Street Centre were thoroughly examined, and six of these were selected, two in each class, for the first competition with other towns. The Chorley babies secured the highest marks in this heat, but at the semi-final competition, held at Manchester, they were not selected for the last competition.

This contest secured a higher attendance for a few weeks, but it is doubtful whether any permanent interest can be maintained by such means.

Mrs. Armitage, who had presided over the St. George's Street Centre since its installation, retired, much to the regret of all concerned, during the year, and Miss Hibbert kindly agreed to take her place. To these ladies, Mrs. Threlfall, president of the Eaves Lane Centre, Mrs. Brindle and Mrs. Triffit, conducting the respective Sewing Sections, and to the other ladies who served the teas at each meeting, the thanks of the town are due.

I regret, through illness, I have not been able to attend the Centres once a week as I was accustomed to do.

Below, I give a short resume of the Centre Meetings :—

CENTRE.	Number of Meetings.	Total Attendances.	Average Attendance	Average of Children Weighed.	Number of individual Babies present.	Average attendance per Child.	Highest Attendance of one Child.	Highest Attendance at one Meeting.	Lowest Attendance at one Meeting.
St. George's Street..	47	928	19.7	16	138	6.7	39	51	6
Eaves Lane	47	855	18	15	114	7.5	42	48	4

Home Visitation.—Through the greater part of the year, two Health Visitors have been engaged in visiting the houses in which infants and young children reside, but owing to the resignation of Nurse Pendlebury in April, more than two months elapsed before her successor entered upon her duties.

The number of births which were notified to me, ascertained by examination of the Registrar's books, transferred from other localities or found out by the Nurses in their daily course of visits, was five hundred and sixty-eight. (568). With the exception of eight cases, all of the homes were visited either during the year or within a week or two after the beginning of 1920—that is to say, about 98 per cent of the babies born in 1919, and their mothers, received the visits of the Health Visitors.

The total number of visits paid during 1919 was five thousand nine hundred and fifty-six (5956), including five hundred and twenty-two (522), in which there was no access at the time of the visits.

The detail sare given in the following Table :—

	1st Visits.	2nd Visits.	3rd Visits.	4th Visits.	5th Visits.	6th Visits.	7th and upwards Visits.	Special Visits.	No access.	Totals.
Nurse Walsh	348	279	259	244	231	212	1426	142	273	3414
Nurse Pendlebury.	67	63	62	49	63	63	344	53	63	827
Nurse Griffiths ...	129	117	92	100	112	103	832	44	186	1715
Totals	544	459	413	393	406	378	2602	239	522	5956

The total number of babies and young children visited during the year was twelve hundred and sixteen (1,216), of which two hundred and ninety-six (296) were born in 1917, four hundred and three (403) in 1918, and five hundred and seventeen (517) in 1919.

The particulars of all these visits have been entered into my Registers by me in the course of my interviews with the Health Visitors, and thereby a record of the health and progress of the children is obtained, and fresh instructions are given when necessary. Also the Health Visitors at these interviews give me any information which they have obtained in reference to any insanitary or defective condition of the houses.

The visitation of the homes by well trained Visitors, is, in my opinion, the most fruitful means of educating the mothers in the best methods of bringing up their babies and young children, and, I am sure, steady persistence in this work will gradually result in the dispelling of ignorance and combatting of prejudices. In addition to the other causes of Infantile Mortality such as insanitary dwellings, hereditary predisposition or disease, etc., ignorance and prejudice are potent factors in causing deaths in young children, and I am glad to say that the visits of the Nurses have been well received by the parents, and in many instances the advice given has been adopted with good results.

Day Nurseries.—For several years, a Day Nursery has been established in Chorley—financed and managed by Mrs. Armitage—and has been much used by the mothers, who, for one reason or another, have been working at the mills, etc., during the day time. Infants and young children have also been received as residents for a shorter or longer period.

Mrs. Armitage, however, feels that it is time for this work to be undertaken by the Municipality, and has given notice to the Town Council that she will close her Nursery in a very short period. This institution has been of great use, especially during the war, and many thanks are due to Mrs. Armitage for her generosity and care of the children committed to her charge. At the time of writing this Report, the Town Council have not finally decided whether to take this Nursery as a Municipal Institution or not.

The Municipal Day and Night Nursery at Moss Cottage, Eaves Lane, was opened in November, 1919, and both day and resident children have been received into this institution since that time

The Nursery is arranged for the reception of twenty (20) day children, and of ten (10) residents.

Great delay in preparing, heating and furnishing the Nursery has been experienced, and the cost of so doing has been much greater than was anticipated, owing to the continual rise in prices.

Scales of charges for day and resident children, have been made by the Town Council.

If proper discrimination be used, and any child of mothers **obliged** to go to work in the day time, or temporarily laid up through illness, children of widows or deserted wives, and illegitimate children be received—a great boon will be conferred on them.

A fuller report of this Institution will, I hope, be made by my successor next year.

F

SANITARY ADMINISTRATION.

1.—**Staff.**—Medical Officer of Health, who is also School Medical Officer—whole time Officer from April 1st, 1920.

2.—Two Sanitary Inspectors and Clerk.

1.—Borough Surveyor.

and a large number of workmen engaged in Scavenging, Destructor Works, etc.

2.—Hospital Accommodation for Diphtheria, Scarlet Fever and Enteric Fever is provided at Heath Charnock in the Chorley Rural District, by the Chorley Joint Hospital Board. This Board embraces the Borough of Chorley, Chorley Rural District and the Urban Districts of Adlington and Leyland, and these several districts are joint contributors, and have joint user of the Hospital.

The Hospital consists of two wards of eight beds each, two wards of six beds each, and four wards of two beds each, administrative block, disinfecting block, and block with steam disinfecter, engine and boiler, steam laundry, etc., The total number of beds is 36, with cubic space of at least 2,000 cubic feet per bed.

One hundred and ten (110) patients were received into the Hospital in 1919, of which forty-nine (49) came from Chorley Borough, forty-three (43) from Chorley Rural District, sixteen (16) from Adlington, and two (2) from Leyland.

In times of epidemic Scarlet Fever, there has been a shortage of accommodation, and supplementary beds have been introduced, but generally, there has been no difficulty in satisfying the needs of the district of the Joint Board.

On the land adjacent to the Isolation Hospital, a Sanatorium was erected some years ago by the Lancashire County Council with thirty beds.

The administration of both Hospital and Sanatorium is carried on by the same Medical Superintendent and Matron, but the Nursing staffs of each Institution are kept separate.

3.—The Local Acts in force in the Borough are as follows :—

Chorley Improvement Act, 1853.

Chorley Improvement Act, 1871.

Several Provisional Orders amending the above Acts.

Public Health Act, 1907—in part.

Bye-laws have also been made in the following matters :—

Common Lodging Houses.

Slaughter House.

Markets.

Recreation Grounds.

Secondary Means of Access to Houses.

Fresh Water Closets and Waste Water Closets

Telegraph Wires.

Betting in Streets.

Music and Singing in Streets.

New Streets and Buildings.

The latter Bye-laws may require amendment, as not being in accordance with the new directions in the Housing of the Working Class Scheme.

4.—Arrangements for Bacteriological examinations are described under Infectious Diseases

Chemical Analyses are made by the County Analyst, both in cases from the Borough instituted by the County Police, and in water analyses, etc., directed by the Town Council.

HOUSING.

G

I.—1.—The total number of houses in the Borough, as far as can be ascertained is seven thousand one hundred and eighteen (7,118) of which six thousand three hundred and seventeen (6,317) are for the use of the working classes.

Only one new house for the working classes was erected in ~~fourteen~~ 1919, ~~no~~ others are in course of erection.

2.—The population, as previously given in this Report, has been estimated by the Registrar General at 32,912 total, and 31,594 civil. His estimate for 1918 was 34,404 total, and 30,705 civil. Whilst disagreeing with the estimate of the total population for 1918, I am of opinion that the present population of the Borough is about 32,000.

More works which will employ a very considerable number of hands, are in contemplation, and, I think, there will be a marked increase in the population in three or four years.

3. (a)—As there has been practically no building for over five years, the Town Council have come to the conclusion that six hundred (600) houses for the working classes are required at the present time

(b)—The intention is to build these houses, and several sites have been selected, provisional arrangements made, plans submitted and approved, etc.

II.—1.—The shortage of houses will appear from the following statistics obtained at the survey in October, 1919.

The working class houses throughout the Borough were visited, and it was found that in eighty-five (85) houses, with a population of eight hundred and sixty eight (868), there were one hundred and fifty-three (153) persons in excess of two to each room (excluding scullery, but including kitchen and other rooms not used as bedrooms).

In	43	houses	there	was	1	person	in	excess.
„	24	houses	there	were	2	persons	in	excess.
„	11	„	„	„	3	„	„	„
„	6	„	„	„	4	„	„	„
„	1	„	„	„	5	„	„	„

When bedrooms only were considered, and two persons for each bedroom, thirteen hundred and ninety-nine (1,399) houses with nine thousand eight hundred and nine (9,809) inhabitants were overcrowded.

In	599	houses	there	was	1	person	in	excess.
„	383	houses	there	were	2	persons	in	excess.
„	205	„	„	„	3	„	„	„
„	122	„	„	„	4	„	„	„
„	44	„	„	„	5	„	„	„
„	28	„	„	„	6	„	„	„
„	12	„	„	„	7	„	„	„
„	6	„	„	„	8	„	„	„

2. — The causes of overcrowding at the present time embrace impossibility of obtaining any house for occupation ; the number of marriages which have been contracted during the last five or six years, and the necessity of the couple and children residing with the parents ; war widows and fatherless children living with relatives, etc., etc.,

3.—No measures have been taken to deal with overcrowding, as, until there are new buildings erected, it has seemed useless to issue summons for overcrowding.

4.—No case of overcrowding dealt with during 1919.

III.—1 (a).—Except in the localities indicated on the map, sent with the recital of the Survey of Housing Needs, October, 1919, by colouring of pink, burnt sienna, yellow and neutral tint, the working class houses were, as a very general rule, before the war in a good condition. The houses are generally brick built, in rows, with yards and back passages, two stories high ; accommodation—parlour, kitchen, scullery, and two or three bedrooms,

supplied with water and gas ; water closet in many cases in the yards. During the last two or three years, a very considerable number of the houses have got out of repair, and it has not been possible for the owners to remedy all the defects occurring during the war as both labour and materials have been insufficient for the purpose.

(b).—The general character of the defects found may be seen in Section VII of this Report.

2 (a).—Under the **Public Health Acts**, one thousand two hundred and seventy-five (1,275) informal notices were served on the owners, and eight (8) statutory notices were issued. Number of visits made, three thousand and forty-two (3,042). The greater part of the work has been carried out.

2. (b).—No Closing Orders have been issued during the year. In respect of some cellar dwellings, I made representation to the Town Council, but, on account of the impossibility to obtain any premises by the inhabitants, the Closing Order was not put in force.

3.—The difficulties in remedying unfitness have been already commented on—every endeavour has been made, especially in the worst cases to expedite the work of repair.

4.—Water supply and refuse disposal have been treated already in this Report. They are satisfactory throughout the town. Closet accommodation is somewhat deficient. As previously stated in about two hundred (200) houses, there is not a closet to each house, but in all cases, not more than two families have the common use of one closet.

IV.—No action has been undertaken in reference to Unhealthy Areas during the year.

V.—1.—The bye-laws in force in the Borough are generally sufficient, and work well.

2.—The bye-laws for new houses and streets ought to be altered in order to comply with the directions of the Health Ministry.

VII.—APPENDICES.

Number of houses—

Inspected	...	...	...	...	...	...	...	75
Considered more or less unfit for habitation	...	...	...	...	...	...	...	73
Recommended to Council for Closure	...	...	...	...	...	...	...	3
Closing Orders made	...	...	...	...	...	...	...	0
In which defects were remedied without the making of Closing Order	...	...	...	...	...	...	...	26
Which were put into habitable state of repair after the issuing of Closing Order...	...	...	...	...	...	...	...	0
Demolished	...	...	...	...	...	...	...	0
Informal Notices served	...	...	...	...	...	...	...	6
Statutory Notices served	...	...	...	...	...	...	...	67
Defects in drainage found	...	...	...	...	...	...	...	17
Insufficiently lighted	...	...	...	...	...	...	...	3
Insufficiently ventilated	...	...	...	...	...	...	...	49
In dirty condition	...	...	...	...	...	...	...	54
Yards in dirty condition or not paved	...	...	...	...	...	...	...	11
In which kitchens were defectively flagged	...	...	...	...	...	...	...	24
In which bedroom floors were defective	...	...	...	...	...	...	...	26
In which stairs were defective	...	...	...	...	...	...	...	22
In which roofs were defective	...	...	...	...	...	...	...	22
In which were defects causing dampness...	...	...	...	...	...	...	...	24
Where closet accommodation was defective	...	...	...	...	...	...	...	23
In which other defects were found...	...	...	...	...	...	...	...	41

Only two houses were in an absolutely satisfactory condition.

In 26 houses, all the repairs have been completed, and 116 defects remedied.

In 42 houses the work is partly done or in hand, and 180 defects in hand.

In five houses no work has been done, with 20 defects.

3.—No action has been taken under Section 28, Housing Act, 1919, during the year.

Under the Public Health Acts, the following list of Improvements made, and Nuisances abated has been carried out during the year.

Improvements made or nuisances abated during 1919, exclusive of nuisances under Housing and Town Planning Act.

Stoppages of fresh water closets removed	...	...	542
„ waste water closets removed	...	...	448
„ yard drains removed	...	...	1002
Defective fresh water closets repaired	...	...	435
Defective waste water closets repaired	...	...	83
Defective yard drains repaired	...	...	53
Dirty houses whitewashed, etc.	...	...	4
Dirty yards and passages cleaned	...	...	43
Defective water supply improved...	...	...	6
Defective eaves and downspouts repaired	...	...	22
Defective slop-pipes repaired	...	...	28
Defective yard flagging repaired	...	...	11
Defective roofs repaired	...	...	4
Defective ventilation improved	...	...	4
Insufficient closet accommodation improved	...	...	2
Improper keeping of fowls and pigs removed	...	...	2
Offensive accumulations removed...	...	...	3
Manure receptacles provided	...	...	1
Other nuisances abated	...	...	23
			2716

In all questions of Public Health it is incumbent upon the Sanitary Authorities to enlighten the public as to the wisdom and necessity of their regulations and directions. By appealing to the

reason of the people, a great amount of ignorance and prejudice may be removed, and co-operation secured. It has been well said, "We cannot be made healthy by Acts of Parliament and Medical Officers. They cannot go beyond what the mind and conscience of the community are ready to perform. Public health is, in the long run, what the public chooses to have it."

I take this opportunity to thank the Council for their courtesy to me during the long period I have tried to serve the interests of the Borough, and especially, for the honour which has been conferred upon me by my appointment as Consulting Medical Officer of Health—an honour which I thoroughly appreciate.

I wish also to thank the Sanitary Inspectors, and other Officials, for their hearty and zealous co-operation in all the work I have undertaken.

I am,

Gentlemen,

Your obedient servant,

JAMES A. HARRIS.

TABLE I.

CAUSE.	At all ages.	AGE GROUPS.							WARDS.				Chorley Residents Workhouse	Deaths in Public Insts.		
		Under 1.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.	North.	South.	East.		West.	Workhouse	Hospital.
Enteric Fever ...	2	...	...	...	...	1	1	...	...	...	...	1	1	...	...
Measles ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria ...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza ...	43	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis Pulmonalis ...	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer ...	29	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis ...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Heart Disease ...	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis ...	56	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia ...	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Respiratory Organs	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea, Enteritis ...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of Liver ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nephritis ...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases, etc., Pregnancy and Parturition	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Debility ...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Premature Birth ...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Violence ...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suicide ...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Defined Diseases	67	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases ill-defined ...	46	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	409	49	13	24	19	20	54	96	134	61	104	126	95	23	34	12

TABLE II.

Causes of Death.			Under 1 week.	1 and under 2 weeks.	2 and under 3 weeks.	3 and under 4 weeks.	Total Deaths under 1 month.	1 and under 3 months.	3 and under 6 months.	6 and under 9 months.	9 and under 12 months.	Total Deaths under 1 year.
Tuberculous Disease	...	...	...	...	...	...	...	...	...	...	1	1
Meningitis...	...	...	...	...	...	...	...	...	...	1	...	1
Convulsions	...	...	1	1	...	...	2	2	...	...	1	5
Bronchitis...	...	...	...	...	...	...	...	3	3	...	...	6
Pneumonia	...	...	...	...	...	...	...	...	...	1	1	2
Gastritis ...	...	...	...	...	...	...	...	...	...	1	...	1
Enteritis ...	...	...	...	1	...	...	1	...	1	1	...	3
Suffocation, Overlaying	...	...	...	...	...	...	...	1	...	...	...	1
Atelectasis	...	...	2	...	...	...	2	...	...	...	...	2
Congenital Debility	...	...	5	...	1	1	7	2	1	1	1	12
Premature Birth	...	...	7	...	2	...	9	1	...	...	...	10
Malformation	...	...	...	1	...	...	1	...	...	...	...	1
Other Causes	...	...	1	...	...	2	3	...	1	...	...	4
Totals	...	...	16	3	3	3	25	9	6	5	4	49

